



TRANSPORTATION CABINET

Frankfort, Kentucky 40622
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Steven L. Beshear
Governor

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MEMORANDUM

Construction Memo No. 05-11

TO: Chief District Engineers
District TEBM's for PDP and Engr. Support
District Section Engineers
C.O. Division Directors

FROM: Steven Criswell, P.E. Director
Division of Construction

Allen Myers, P.E. Director
Division of Materials

DATE: July 6, 2011

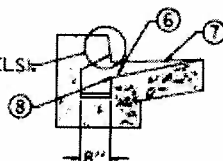
SUBJECT: Type B Drainage Box As-Built vs. Standard Drawings

The purpose of this correspondence is to inform you of an issue discovered during field visits and final inspections of Type B drainage boxes. Some of the installation of these boxes at the end of the curb located under the Type A or A-1 Guardrail Connector to Bridge End treatments are not correct. This situation leads to questions regarding the crashworthiness of this type of guardrail end treatment.

Standard Drawing RBC-001 covers the Type A or A-1 guardrail end treatment. One important detail of this installation is the requirement for an **island curb** that is to transition from the bridge end to the drain box (if a drain box is required).

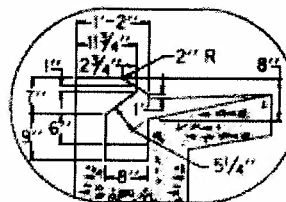
Standard Drawings RDB-280 and RDB-281 detail the shape of the box top for Type B drainage boxes. Notes accompanying the drawings stipulate that the box top is to be cast to match the curb shape to which it will be attached (see drawing below). Various curb shapes are detailed beyond the "standard" variety such as the **island curb** as shown below:

MATCH ADJACENT CURB
(SEE CUR. STD. DWG.
RDB-281 FOR CURB DETAILS)



VIEW

SECTION C-C



ISLAND CURB

It is the Contractor's responsibility to order the correct box top from the supplier in order to match the island curb used for this type of guardrail end treatment. A copy of this joint memo will be provided to the precasters to inform them of the need to supply a Type B drain box that



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meets the project requirements. District construction crews should be attentive to this requirement and ensure conformance with this criteria.

Corrective actions will be required on projects which have these incorrect box tops. Two options are offered:

1. In order to mitigate the risk associated with this configuration additional double ply guardrail must be installed. Standard Drawing RBC-001 details 25 linear feet of double ply rail coming off the bridge barrier wall, this retrofit would require an extension of this double ply rail to fifty (50) linear feet.
2. Replace the drain box top with the correct one.

The cost associated with either repair procedure is to be borne by the Contractor.

On all future installations it is desired that these drain boxes be built accordingly to the Standard Drawing and not relying on the use of additional double ply rail to offset the incorrect installation.

If you have any questions, please contact this office.

Cc:	S. Waddle	KAHC
	Bob Lewis	Central Office Construction Liaisons
	FHWA	PAIKY
	Precast Suppliers	